SOCIETY PROCEEDINGS

Reports for this department should be sent at the earliest date practicable to Dr. Harry S. Gradle, 22 E. Washington St., Chicago, Illinois. These reports should present briefly the important scientific papers and discussions.

ST. LOUIS OPHTHALMIC CONFERENCE.

May 14, 1920.

DR. HAYWARD POST, Presiding.

Localization of Foreign Bodies in the Eye.

DR. M. B. TITTERINGTON (by invitation) read a paper on this subject.

DISCUSSION: Dr. John Green: In a number of my patients Dr. Titterington has localized very accurately intraocular foreign bodies. One patient had sustained an injury a year before I saw him. His attendant removed a foreign body from the cornea. Subsequently the eye showed a discoloration of the iris and several dark brown spots on the anterior lens capsule, accompanied by visual failure. Dr. Titterington localized a minute fragment in the ciliary body. It was exceedingly important that the localization should be as accurate as possible as we were probably dealing with a foreign body that was encapsulated and it was necessary that the small magnet be introduced as close as possible to the foreign body. Thru a very small incision at the indicated site the tip of a small hand magnet was introduced and on the second attempt a very small particle was removed. The patient did well tho eventually a traumatic cataract developed, which was extracted. Patient has fair vision, 20/120, which probably could be improved by division of the membrane. I advised against it because of the fact that the other eye was perfectly good.

Another patient in whom a foreign body was disclosed by the doubly sensitized film, was interesting also in that a competent roentgenologist had made a plate some two years before and found no evidence of a foreign body. In this particular case the question arose as to whether any operative interference was justified.

Recent experience has seemed to show that our former views as to the removal of an eye in which there is a foreign body may have to be modified. In the presence of an intraocular foreign body most ophthalmologists will insist that the foreign body be removed, or if this is not possible, that the eye be enucleated. On the other hand, a number of men, especially those who have had overseas experience, are inclined to think that such an eye may be retained. This view is doubtless due to the very small number of cases of sympathetic ophthalmia seen during the World War.

My patient had had a combined extraction performed by another surgeon; the iris was muddy brown and tremulous and there was floating material in the vitreous. Vision p. l.; field defective. I told the patient there were three courses open; first, that no operation be performed in view of the fact that the eye was painless and unirritated, and that there was no irritation of the other eye; second, that an attempt to remove the foreign body might be successful, but, on the other hand, might lead to the loss of the eyeball; third, that the globe be removed. After explaining the *pros* and *cons*, the patient decided to leave well enough alone. I am rather inclined to think he adopted the most rational course.

Dr. W. H. Luedde: A lateral view, to determine the presence of a foreign body, may prove disappointing; in a recent case the shadow of the fragment of steel was completely masked by the shadow caused by unequal density of the cranial bones and it required an anteroposterior view to discover the foreign body. It appears to be unsafe in any case to be satisfied with a roentgenogram taken in only one direction.

This same case illustrated another difficulty. A localization was made by Dr. Titterington with the result that the horizontal and vertical projections on the chart did not agree as to whether the fragment was just inside or outside of the sclera. The diagrams were based on the average size of the eyeball and a variation of a millimeter in actual size may

thus lead to confusion and error. In this case, the fragment had entered thru the cornea and lens, the clouding of the media making it impossible to get a view of the fundus with the ophthalmoscope. On exposure to a giant magnet, there was a strong "pulling" sensation so that the globe was opened in an attempt to deliver the fragment. In spite of the introduction of a metal tip deeply into the vitreous, no fragment presented itself. The operative wound healed perfectly and the slight inflammatory reaction indicated that the fragment was, after all, lying in the orbital tissues having probably passed entirely thru the globe.

Perhaps a procedure noted in the special report of Dr. M. F. Terrien on "The Use of Radium and X-Rays in Ophthalmology" (1919), might be of some help. He suggested a study of the change of position of the shadow produced by rotation of the eyeball. It is quite likely that this fragment was so close to the sclera that it would have moved with the ocular movement even tho truly extraocular.

In another case X-ray localization was practically out of the question, due to the large number of fragments. A tray loaded with detonating caps exploded while the workman was carrying it. His face, body, and lower limbs contained many fragments. Both eyes were perforated at several points, but the intraocular fragments seemed to be causing no trouble. Conservative treatment resulted in an unexpected degree of vision in each eye in spite of opacities in both lens and cornea due to penetrating wounds and the retention of tiny fragments.

This brings up the question of the retention of fragments in the eye. Several years ago a man was brought to me who had sustained a severe ocular injury, the result of an explosion in a coal mine. The eye seemed hopelessly lost. There were several fragments clearly visible on the iris. Nevertheless, the eye quieted and was retained. No general rule can apply to all cases. Each must be judged after close observation. According to recent experiences, fragments of copper are particularly liable to make trouble.

Dr. Wm. F. Hardy: Cases calling for good judgment are those in which one is undecided, even with a roentgenogram, whether the foreign body is inside or outside the globe. I have in mind two cases; one Dr. Luedde saw with me ten years ago, in which the X-ray picture had failed to definitely localize the foreign body. On enucleating the eye, my scissors hit something metallic. The foreign body was partly in and partly outside the eyeball.

Another case was one I had at the Barnes Hospital, being that of a boy who had been shot in the eye with B.B. shot. Nothing could be seen in his eye because the lens was cataractous. There was great doubt as to whether the foreign body was located in or outside the eye. I watched him for several months, and finally decided it would be well to remove the eye. The shot was inside the optic nerve and partly in and partly outside the globe. I hit it with my scissors when I enucleated. I feel, therefore, that such cases are those where the best judgment should be used on the part of the ophthalmologist.

Dr. F. E. Woodruff: It seems to me altogether too early to base any opinion on the advisability of leaving a foreign body in the eye, from experience in the war. Accidents frequently happen in uneducated men, who move about from place to place, and we cannot afford to take a chance and let an ignorant man go away from competent medical attention with a foreign body in the eye. These men are very prone to minimize their troubles and after sympathetic inflammation has started it is too late to do anything. One is safe in taking out a foreign body and one is also safe in removing the eye with an imbedded foreign body. To let a man go away from observation with a foreign body in the eye is extremely hazardous, as far as the fellow eye is concerned. When there is a suspicion that a fragment of glass is in the eye, it is often of advantage to take a bit of the glass and place it on the X-ray plate to determine whether the suspected glass will make a shadow, for all glass does not do so.

Dr. John Green: In regard to gunshot wounds, it seems to me that one is pretty safe in retaining the globe. I

have two patients who sustained gunshot wounds, one eleven and one twelve years ago. In one there was a double perforation of the globe and the localization showed the shot two or three millimeters behind the eyeball, probably not in the optic nerve. In the other, it was a question whether there was a double perforation or whether the shot was in the sclera. A double exposure on the same plate, the one made with the eyes rotated down, the other with the eyes rotated up, showed two shot shadows, so it was inferred that the shot was in the sclera. Both of these eyes are blind, but both of them for the most part, have been quiet.

Dr. Wm. F. Hardy: Dr. Green and Dr. Woodruff both brought up points which remind me of a case I saw. A man was struck in the eye with a No. 6 shot, a glancing blow, penetrating the lower lid. He was evidently looking up when the shot entered, as the penetration occurred in the equatorial region. When I saw him the vitreous was so full of blood that no details could be seen at all. He came to me because he had been to another ophthalmologist who had urged immediate removal of the eye. As the eye was never red, no irritation present, no wound of entrance to be seen, except the wound thru lid, and in view of the fact that he had no symptoms whatever, except loss of vision, I decided that I could with safety keep the eye in his head. An X-ray localization was made and it showed a shot in the eye. I feel, with Dr. Green, that in such cases it is not incumbent upon us to urge enucleation.

Dr. Lawrence Post: The practice of the British at the eye base in Rouen was to remove all foreign bodies from the globe, whenever possible. The method employed was to place the patient, suspected of having a foreign body in the globe, before a giant magnet in the hope of drawing the metal fragment into the anterior chamber. If no result was obtained, localization plates were made.

Dr. Titterington: (Closing) Instead of plates, we often use films which have sensitized emulsion on each side. Employing an intensifying screen, which is covered with a fluorescent salt, as soon as the X-ray light strikes the salt, it fluoresces and it is with this fluorescence that the picture is really made, and not with X-ray light. One of these intensifying screens is put on either side of the film. The exposure is only one-eighth of what it would be with an ordinary plate. If any metallic body is traversed by the X-ray, there is a secondary radiation given off and if the particle is very small and is submitted to the rays long enough, these secondary rays will blot it out. Dr. Luedde spoke of not being able to locate foreign bodies on account of being situated over a bony ridge. I have had that same experience. Now I always make two lateral exposures at different angles. Sometimes both exposures are made on one plate.

Disorders of Lacrimal Drainage.

Dr. H. D. Lamb read a paper upon this subject which is published in full, p. 197.

Discussion: Dr. J. W. Charles: While treatment is usually unsuccessful, the older I grow the more I feel that we ought not to give up, because occasionally we do have success. The first patient I had was a boy of nineteen. He had probably a congenital closure of the nasal duct since his history showed a lacrimation from babyhood. I found that he had a slight dacryocystitis, and I could get a probe almost into the nose and there it stopped. After several unsuccessful attempts I entered a No. 8 Bowman as far as it would go, and bore down with all my weight. There was a crash, the patient fainted, but I got thru. On his return home I provided him with a No. 6 Bowman, which I taught him to pass. He went to New Mexico, and wrote me a year after that he did not have any more trouble, and he has not had since. He did not use the probe after the first year.

One can occasionally teach parents to cleanse the sac of a child with dacryocystitis. I have now a child of eight that has been operated on by a rhinologist and oculist without success. In the past she has had occasional lac

rimal abscesses with fistula. I have taught the father to syringe the sac and he is keeping it thoroly clean; and I believe that the child is getting rid of the infection and later, if the sac no longer discharges pus, I shall, as a final resort, make an endeavor, with the assistance of a rhinologist, to secure drainage by means of one of the newer methods of making a window into the nose.

Dr. Wm. H. Luedde: There is so much to be said about our experiences with dacryocystitis that general discussion may be dulled by too much detail. The importance of these cases was deeply impressed by the experience of a young man who lost an eye from acute panophthalmitis following a penetrating wound. He had a double dacryocystitis apparently due to congenital absence of both lower puncta. The treatment of that case by dacryocystorhinostomy was described by Dr. W. M. C. Bryan and myself in the Annals of Ophthalmology, July, 1912.

Dr. John Green: Eversion of the puncta due to chronic dermatitis in elderly persons is often difficult to manage. I am never able to prognosticate whether slitting the canaliculus or taking out a triangular shaped piece, according to the technic of Dr. Charles, is going to be beneficial or not. Some cases, so treated, drain perfectly. Others, in which there is contact between the slit or excised canaliculus and the globe, have just as much epiphora after as before the operation. I assume, of course, that the lacrimonasal canal is patent. I do not believe that invariably an ectasia of the sac remains after reestablishment of drainage. I have two cases in mind in which there was sufficient elasticity remaining in the sac to bring about contraction, after I had done the combined operation of curettage and rapid dilatation. Dr. Lamb spoke of the uselessness of any method short of excision of the sac in trachoma of the sac. I am not sure that that is strictly the right point of view. We know that abrasive methods in trachoma of the lids are very efficacious. It is conceivable that abrasive methods with burs, reamers, and curettes may be efficacious in trachomatous inflammation of the sac.

I am one of the believers in the early passage of a small probe in infantile dacryocystitis. It seems to me unwise to continue syringing in these cases for a long period in the hope that eventually patency will be established. That does occur sometimes, but it often involves months and months of treatment. It seems to me that the judicious passage of a small probe, which may be repeated, is the preferred method. This is done under local anesthesia. I have never had to pass the probe more than three times, and I always allow long intervals to elapse between probings. Very frequently, the single passage of No. 2 or No. 3 Bowman (I have never gone above No. 3 Bowman) will restore patency and the trouble is absolutely at an end. I do not slit the canaliculus.

Dr. Wm. F. Hardy: It has always been a mystery to me why excision of the sac has been so little practised in this country when it is so popular in Europe. I have not had many cases in which I have removed the sac, but in those in which I have done it, I have gotten satisfactory results. The one Dr. Post removed in the Clinic was the largest dilated sac I have ever seen. Four months later the patient reported with a perfect result. The operations such as are now in vogue, and which Dr. Lamb showed us are very old; while they do not appear unsurgical, they do seem unnatural to me. I cannot conceive of them curing all or even a large majority of the cases; and where we have chronic, intractable dacryocystitis, it seems to me that there is less trauma and less surgery done in excision of the sac than by any other method. The epiphora, which is the thing to be feared after excision, does not materialize, except in a small proportion of cases; and certainly the chance of regurgitation of purulent material into the conjunctival sac is absolutely obviated, which more than compensates for the inconvenience of an epiphora, often transitory.

Dr. Lawrence Post: I agree entirely with Dr. Hardy. When I have had very long drawn out cases, which re-

fused to get well with the usual methods of probing and irrigation, I have usually resorted to excision of the sac. The results have been so good that I have never felt the need of any other procedure. Epiphora has seldon lasted longer than six weeks.

DR. LAWRENCE POST read a paper entitled: "A Study of the Etiology of Periodic Ophthalmia in Horses." To be published in full in this journal.

JOHN GREEN,
Secretary.

PITTSBURGH OPHTHALMOLOGICAL SOCIETY.

Dec. 6, 1920.

DR. E. B. HECKEL, President.

Enlargement of Pituitary Body.

DR. EDWARD STIEREN presented a forty year old man, a printer by occupation, whose right eye had gradually become blind in the past six months. In addition he complained of a deep seated pain in the right temporal and frontal regions, some loss of memory and loss of sexual power.

When first seen Oct. 11, 1920, the pupils were normal in size and reaction; tension of each eye was 26 mm. (McLean), R. V. 1/40, L. V. 6/6—, with —1.D.Sph. The corneae, lenses and media were clear. The temporal half of the right optic nerve was pale,

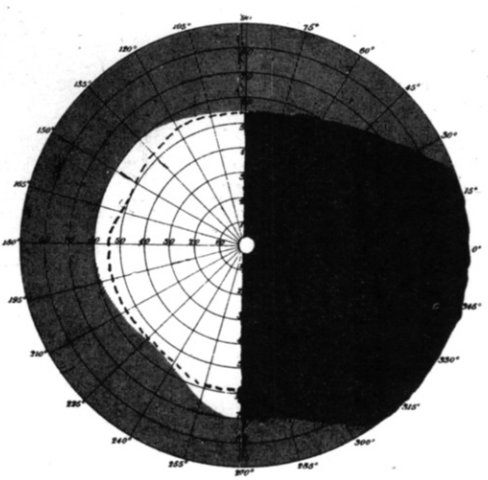

Fig. 1.—Enlargement of pituitary body with complete temporal hemianopsia in the right eye. Chart of field taken October 11, 1920, with 10 mm. object.

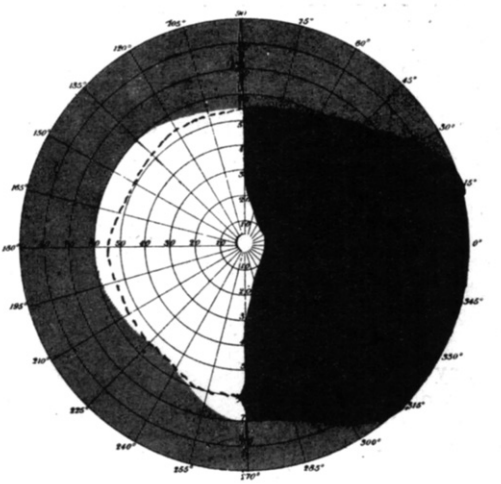

Fig. 2.—Enlargement of pituitary body. Extension of field of the right eye almost 10 degrees beyond the fixation point. Chart taken November 24, 1920, with 2 mm. object.

and there was a narrow pigmented crescent at the temporal edge of the disc. The left nerve head was normal. No nystagmus. Perimetric examination disclosed a complete temporal hemianopsia in the right eye; the field of the left was normal for form and colors. (See Fig. 1).

Neurologic examination by Dr. W. H. Mayer: Arm, abdominal, cremasteric and patellar reflexes are present and normal. There is no Babinski. No evidence of any cranial nerve palsy nor any muscular twitching or tremor. His physical development is good with a rather undue prominence of features, a definite thickness of his fingers with a tendency toward the trident hand. He is short and heavy set, and has the straight lumbar spine so often noted in endocrine conditions. The thickness of the bone shafts appear unusually heavy both to palpation and X-ray examination while the epiphyses are normal. There is a ring of fatty distribution in the abdomen above the umbilicus (Marie's sign). The gonads are well developed and show no abnormality. X-ray of the head shows a definite thinning of the floor of the sella, the anterior and posterior clinoid processes are indefinite and appear eroded.

Laboratory examination: Blood and spinal Wassermann negative; urine negative; blood count, Hb. 95%,